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10/691,308	10/22/2003	Richard D. Dettinger	ROC920030320US1	6406
46797 7590 02/11/2009 IBM CORPORATION, INTELLECTUAL PROPERTY LAW DEPT 917, BLDG. 006-1 3605 HIGHWAY 52 NORTH ROCHESTER, MN 55901-7829				
EXAMINER				
PHAM, KHANH B				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/691,308

Applicant(s)

DETTINGER ET AL.

Examiner

Khanh B. Pham

Art Unit

2166

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 November 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 6, 7, 9-11, 14-16 and 28-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6, 7, 9-11, 14-16 and 28-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Objections

1. Claim 6 is objected to because of the following informalities: duplicate "the" at line 17 of claim 6 should be deleted. Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 1-4, 6-7, 9-11, 14-16, 28-30** are rejected under 35 U.S.C. 103(a) as being unpatentable over DiDomizio et al. (US 6,453,312 B1), and in view of Ryan et al. (US 6,421,675 B1).

As per claim 1, DiDomizio teaches a method for context-sensitive searching of fields of a data repository using multiple levels of term expansion comprising:

- "receiving, from a user, a relational database query containing a plurality of conditions, wherein at least one condition for searching at least one field of data repository, wherein the at least one condition includes at least one base search term providing a keyword to search for in an unstructured text field of the relational database" at Col. 6 lines 48-67 and Figs. 2-7 ;

- “obtaining one or more parameters associated with the base search term, wherein the one or more parameters associated with the base search term comprise a user-specified level of expansion” at Col. 7 lines 25-35 and Figs. 3-5;
- “obtaining, based at least in part on the user-specified level of expansion, one or more expanded search terms” at Col. 7 line 25 to Col. 8 line 25 and Figs. 3-5;
- “prior to executing the query the relational database query, modifying the relational database query to contain one or more additional conditions based on the one or more expanded search terms” at Col. 8 lines 25-65 and Figs. 3-5.

DiDomizio does not explicitly teach one or more parameter comprises “a credential associated with the user and a role associated with the user” nor obtaining, based at least in part on “the credential associated with the user and the role associated with the user” as claimed. However, Ryan teaches a method for obtaining a list of suggested keywords based on a user's query, wherein the user's query includes “a credential associated with the user and a role associated with the user” at Col. 5 lines 10-35 and Col. 14 lines 15-45. Ryan also teaches the step of obtaining, based at least in part, on “the credential associated with the user and the role associated with the user, one or more expanded search terms” at Col. 29 lines 10-60. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine Ryan with DiDomizio's teaching by providing expanded search terms based on user's credential and roles so that only keywords which are useful for a particular user's group are suggested to the user.

As per claim 2, DiDomizio and Ryan teach the method of claim 1 discussed above. DiDomizio also teaches wherein "the one or more parameters associated with the base search term comprise a name of the at least one field" at Col. 6 lines 55-60 and Figs. 3-6.

As per claim 3, DiDomizio and Ryan teach the method of claim 1 discussed above. DiDomizio also teaches: wherein "the one or more parameters associated with the base search term comprise a name of a table containing the at least one field" at Col. 6 lines 55-60 and Figs. 3-6.

As per claim 4, DiDomizio and Ryan teach the method of claim 1 discussed above. DiDomizio also teaches: wherein "different one or more expanded search terms are obtained for the at least one base search term depending on the name of the at least one field" at Col. 7 line 25 to Col. 8 line 25 and Figs. 3-5.

As per claim 6, DiDomizio teaches a method for searching fields of a data repository using multiple levels of term expansion, comprising:

- "receiving, from a user, a relational database query containing a plurality of conditions, wherein at least one condition is a condition for searching at least one field of the data repository, wherein the at least one condition includes at least one base search term providing a keyword to search for in an

unstructured text field of the relational database" at Col. 6 lines 48-67 and Figs. 2-7;

- "providing an interface allowing a user to specify a level of expansion associated with the base search term" at Col. 7 lines 25-35 and Figs. 3-6 ;
- "obtaining the level of expansion associated with the base search term" at Col. 7 line 25 to Col. 8 line 25 and Figs. 3-5;
- "obtaining, based on the base search term, the associated level of expansion, one or more expanded search terms" at Col. 7 line 25 to Col. 8 line 25 and Figs. 3-5 ; and
- "prior to executing the relational database query, modifying the relational database query to contain one or more additional conditions, wherein each additional condition includes one of the one or more expanded search terms" at Col. 8 lines 25-65 and Figs. 3-5 .

DiDomizio does not explicitly teach "determining one or more parameter specifying at least credential associated with the user and a role associated with the user" nor "obtaining, based on the one or more parameter, one or more expanded search terms" as claimed. However, Ryan teaches a method for obtaining a list of suggested keywords based on a user's query, wherein the user's query includes "a credential associated with the user and a role associated with the user" at Col. 5 lines 10-35 and Col. 14 lines 15-45. Ryan also teaches the step of obtaining, based at least in part, on "the credential associated with the user and the role associated with the user, one or

more expanded search terms" at Col. 29 lines 10-60. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine Ryan with DiDomizio's teaching by providing expanded search terms based on user's credential and roles so that only keywords which are useful for a particular user's group are suggested to the user.

As per claim 7, DiDomizio and Ryan teach the method of claim 6 discussed above. DiDomizio also teaches: wherein "the base search term corresponds to an instance data value of the at least one field" at Col. 6 lines 55-60.

As per claim 9, DiDomizio and Ryan teach the method of claim 6 discussed above. DiDomizio also teaches: wherein "obtaining one or more expanded search terms comprises selecting a set of expanded search terms from a plurality of sets of expanded search terms, each set corresponding to a different level of expansion" at Col. 7 line 25 to Col. 8 line 25 and Figs. 3-5.

As per claim 10, DiDomizio and Ryan teach the method of claim 9 discussed above. DiDomizio also teaches: wherein "the number of expanded search terms in each set is dependent on the corresponding level of expansion" at Col. 7 line 25 to Col. 8 line 25 and Figs. 3-5 .

As per claim 11, DiDomizio teaches a method for context-sensitive searching of fields of a data repository, comprising:

- "receiving, from a user, a relational database query containing at least one condition for searching at least one field of the data repository, wherein the at least one condition includes at least one base search term" at Col. 6 lines 48-67 and Figs. 2-7;
- "prior to executing the relational database query, modifying the relational database query to contain one or more conditions based on one or more expanded search terms" at Col. 8 lines 25-65 and Figs. 3-5;
- "wherein the one or more parameters associated with the base search term further comprises at least a name of the at least one field and different one or more expanded search term are obtained for the at least one base search term depending on the name of the at least one field" at Col. 6 lines 55-60 and Figs. 3-6.

DiDomizio does not explicitly teach "determining one or more parameter specifying at least credential associated with the user and a role associated with the user" nor "obtaining, based on the one or more parameter, one or more expanded search terms" as claimed. However, Ryan teaches a method for obtaining a list of suggested keywords based on a user's query, wherein the user's query includes "a credential associated with the user and a role associated with the user" at Col. 5 lines 10-35 and Col. 14 lines 15-45. Ryan also teaches the step of obtaining, based at least in part, on "the credential associated with the user and the role associated with the user, one or more expanded search terms" at Col. 29 lines 10-60. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine Ryan

with DiDomizio's teaching by providing expanded search terms based on user's credential and roles so that only keywords which are useful for a particular user's group are suggested to the user.

As per claim 14, DiDomizio and Ryan teach the method of claim 11 discussed above. DiDomizio also teaches: wherein "the one or more parameters associated with the base search term comprise a name of a table containing the at least one field" at Col. 6 lines 55-60.

As per claim 15, DiDomizio and Ryan teach the method of claim 11 discussed above. DiDomizio also teaches: wherein "the one or more parameters associated with the base search term comprise a level of expansion" at Col. 7 lines 25-35 and Figs.3-5.

As per claim 16, DiDomizio and Ryan teach the method of claim 15 discussed above. DiDomizio also teaches: wherein "the level of expansion is dependent on one or more other ones of the one or more parameters" at Col. 7 lines 25-35 and Figs.3-5.

As per claim 28, DiDomizio teaches a method of searching fields of a data repository using dynamic term expansion, comprising:

- "obtaining a relational database query containing at least one condition for searching at least one field of the data repository, wherein the at least one condition includes at

least one base search term providing a keyword to search for in an unstructured text field of the relational database" Col. 6 lines 48-67 and Figs. 2-7;

- "identifying, based on the base search term and one or more parameters, a set of expanded terms associated with the base search term" at Col. 7 line 25 to Col. 8 line 25 and Figs. 3-5;
- "generating a pointer to the identified set of expanded search terms" at Col. 8 lines 25-65 and Figs. 3-6;
- "and prior to executing the relational database query, modifying the relational database query to contain one or more conditions based on one or more expanded search terms retrieved using the pointer" at Col. 8 lines 25-65 and Figs. 3-5.

DiDomizio does not explicitly teach "determining one or more parameter specifying at least credential associated with the user and a role associated with the user" nor "identifying, based on the one or more parameter, one or more expanded search terms" as claimed. However, Ryan teaches a method for obtaining a list of suggested keywords based on a user's query, wherein the user's query includes "a credential associated with the user and a role associated with the user" at Col. 5 lines 10-35 and Col. 14 lines 15-45. Ryan also teaches the step of obtaining, based at least in part, on "the credential associated with the user and the role associated with the user, one or more expanded search terms" at Col. 29 lines 10-60. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine Ryan with DiDomizio's teaching by providing expanded search terms based on user's

credential and roles so that only keywords which are useful for a particular user's group are suggested to the user.

As per claim 29, DiDomizio and Ryan teach the method of claim 28 discussed above. DiDomizio also teaches: "modifying the identified set of expanded search terms after generating the pointer" at Col. 8 lines 25-65 and Figs. 3-5.

As per claim 30, DiDomizio and Ryan teaches the method of claim 28 discussed above. DiDomizio also teaches: wherein "the pointer comprises a directory path to a database" at Col. 8 lines 25-65 and Figs. 3-5.

Response to Arguments

4. Applicant's arguments filed have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khanh B. Pham whose telephone number is (571) 272-4116. The examiner can normally be reached on Monday through Friday 7:30am to 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain Alam can be reached on (571) 272-3978. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Khanh B. Pham/
Primary Examiner
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February 10 2008